CLAIMS

What is claimed is:

1. A reproducing apparatus comprising:

a reproducing unit to reproduce mainstream data and sub audio data separately added in the mainstream data, wherein the reproducing unit comprises a counter used in reproducing the sub audio data.

2. The apparatus of claim 1, wherein the counter includes a sub audio arrival time clock (ATC) counter used to depacketize the sub audio data.

3. The apparatus of claim 2, wherein the counter further comprises a sub audio system time clock (STC) counter used to decode the depacketized sub audio data.

4. The apparatus of claim 1, wherein the mainstream data comprises still image data.

5. A reproducing apparatus comprising:

a mainstream reproducing unit to reproduce mainstream data including still image data, using a clock for mainstream data; and

a sub audio reproducing unit to reproduce sub audio data separately added into the mainstream data, using a clock for sub audio data.

6. The apparatus of claim 5, wherein:

the mainstream reproducing unit comprises:

a mainstream depacketizer that depacketizes the mainstream data, and

a mainstream ATC counter which is used in depacketizing the mainstream data with the mainstream depacketizer; and

the sub audio reproducing unit comprises:

a sub audio depacketizer that depacketizes the sub audio data, and

a sub audio ATC counter which is used in depacketizing the sub audio data with the sub audio depacketizer.

7. The apparatus of claim 6, wherein:

the mainstream reproducing unit further comprises:

a mainstream decoder that decodes the mainstream data output from the mainstream depacketizer, and

a mainstream STC counter that provides a clock used in decoding the mainstream data with the mainstream decoder; and

the sub audio reproducing unit further comprises:

a sub audio decoder that decodes the sub audio data output from the sub audio depacketizer, and

a sub audio STC counter that provides a clock used in decoding the sub audio data with the sub audio decoder.

8. A reproducing method comprising:

reproducing sub audio data, separately added into mainstream data, using a clock reproducing the sub audio data.

9. The method of claim 8, wherein the reproducing sub audio data depacketizes the sub audio data using a first clock depacketizing the sub audio data.

10. The method of claim 9, wherein the reproducing sub audio data further comprises decoding the sub audio data using a second clock decoding the depacketized sub audio data.

11. The method of claim 8, wherein the mainstream data comprises still image data.

12. A reproducing method comprising:

reproducing mainstream data comprising still image data using a first clock reproducing the mainstream data; and

reproducing sub audio data, which is separately added in the mainstream data, using a second clock reproducing the sub audio data.

13. The method of claim 12, wherein the reproducing mainstream data comprises:

depacketizing the mainstream data using an arrival time clock depacketizing the mainstream data; and

decoding the mainstream data using a system time clock decoding the depacketized mainstream data.

14. The method of claim 13, further comprising:

demultiplexing the depacketized mainstream data prior to decoding the mainstream data.

15. The method of claim 12, wherein the reproducing sub audio data comprises:

depacketizing the sub audio data using an arrival time clock depacketizing the sub audio data;

decoding the sub audio data using a system time clock decoding the depacketized sub audio data.

16. A computer readable recording medium storing a program executing a reproducing method, comprising:

reproducing sub audio data separately added in mainstream data, using a clock reproducing the sub audio data.

17. A computer readable recording medium storing a program executing a reproducing method, wherein the reproducing method comprises:

reproducing mainstream data including still image data using a clock reproducing the mainstream data; and

reproducing sub audio data separately added into the mainstream data using a clock reproducing the sub audio data.

18. A reproducing apparatus reproducing video and audio data streams recorded on a recording disc, comprising:

a first reproducer reproducing a first data stream based on first counters; and

a second reproducer reproducing a second data stream based on second counters.

19. The apparatus of claim 18, wherein when the first and second counters are independently adjusted without affecting each other.

20. The apparatus of claim 18, wherein the first counters comprise a first arrival time clock counter and a first system time clock counter, and the second counters comprise a second arrival time clock counter and a second system time clock counter which are initialized based on program clock reference information in the first and second data stream.

21. The apparatus of claim 20, wherein the first reproducer comprises:

a first buffer which captures the first data stream;

a first source depacketizer which depacketizes the first data stream based on a count of the first arrival time clock counter;

a demultiplexer which demultiplexes the depacketized first data stream; and

a first decoder decoding the demultiplexed first data stream based on a count of the first system time clock counter.

22. The apparatus of claim 21, wherein the first data stream comprises mainstream data, and the second data stream comprises sub audio data.

23. The apparatus of claim 22, wherein the mainstream data comprises still image data.

24. The apparatus of claim 22, wherein the mainstream data comprises a browsable slide show.

25. The apparatus of claim 22, wherein the first decoder comprises:

an audio decoder which decodes audio data;

a sub picture decoder which decodes sub picture data; and

a video decoder which decodes video data.

26. The apparatus of claim 25, wherein when the mainstream data comprises a browsable slide show the audio decoder is inactive.

27. The apparatus of claim 21, wherein the second reproducer comprises:

a second buffer which captures the second data stream;

a second source depacketizer which depacketizes the second data stream based on a count of the second arrival time clock counter;

a second decoder decoding the depacketized second data stream based on a count of the second system time clock counter.

28. The apparatus of claim 27, wherein the first data stream comprises mainstream data, and the second data stream comprises sub audio data.

29. The apparatus of claim 27, wherein the second data stream comprises sub audio data which is reproduced regardless of the first data stream reproduction.

30. The apparatus of claim 27, wherein the second data stream is separately added to the first data stream on the recording disc.